

AMENDMENTS TO THE CLAIMS:

Claims 1-36 **(Cancelled)**

37. **(New)** A heat sink comprising:

 fins formed of metal wires wound into coils, including a right-handed coil and a left-handed coil; and

 a thermally conductive base plate retaining said fins;

 wherein each of said right-handed coil and said left-handed coil has plural turns respectively constituting mutually aligned coil elements; and

 wherein said right-handed coil and said left-handed coil are combined and flattened such that said coil elements are in close contact with each other, so as to form air gaps and contact parts.

38. **(New)** The heat sink set forth in claim 37, said contact parts of said coils are thermally coupled.

39. **(New)** The heat sink set forth in claim 37, wherein said fins are disposed relative to said base plate in a standing manner.

40. **(New)** The heat sink set forth in claim 39, wherein said base plate has a groove formed therein, and said fins are disposed in said groove in said standing manner.

41. **(New)** The heat sink set forth in claim 40, wherein said fins are thermally coupled to said groove in said base plate.

42. **(New)** The heat sink set forth in claim 37, wherein said fins have flat surfaces that are arranged parallel to said base plate.

43. **(New)** The heat sink set forth in claim 42, wherein void spaces are formed between said fins and said base plate, and said void spaces are filled with ferrite powder.

44. (New) The heat sink set forth in claim 37, wherein said metal wires are constituted by flat metal wires.

45. (New) The heat sink set forth in claim 37, wherein said right-handed coil and said left-handed coil are mutually intertwined.

46. (New) The heat sink set forth in claim 45, said contact parts of said coils are thermally coupled.

47. (New) The heat sink set forth in claim 45, wherein said fins are disposed relative to said base plate in a standing manner.

48. (New) The heat sink set forth in claim 47, wherein said base plate has a groove formed therein, and said fins are disposed in said groove in said standing manner.

49. (New) The heat sink set forth in claim 48, wherein said fins are thermally coupled to said groove in said base plate.

50. (New) The heat sink set forth in claim 45, wherein said fins have flat surfaces that are arranged parallel to said base plate.

51. (New) The heat sink set forth in claim 50, wherein void spaces are formed between said fins and said base plate, and said void spaces are filled with ferrite powder.

52. (New) The heat sink set forth in claim 45, wherein said metal wires are constituted by flat metal wires.

53. (New) A sheet-shaped heat sink comprising:
a base film with agglutinant; and

fins formed of metal wires wound into coils, including a right-handed coil and a left-handed coil, on said base film; and

wherein each of said right-handed coil and said left-handed coil has plural turns respectively constituting mutually aligned coil elements; and

wherein said right-handed coil and said left-handed coil are combined and flattened such that said coil elements are in close contact with each other, so as to form air gaps and contact parts.

54. **(New)** The sheet-shaped heat sink set forth in claim 53, wherein said right-handed coil and said left-handed coil are mutually intertwined.

55. **(New)** The sheet-shaped heat sink set forth in claim 54, wherein said metal wires are constituted by flat metal wires.

56. **(New)** The sheet-shaped heat sink set forth in claim 53, wherein said metal wires are constituted by flat metal wires.